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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,947	03/13/2008	Eiju Suzuki	Q92273	8599
23373 7590 01/29/2009 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037				
EXAMINER				
FISCHER, JUSTIN R				
ART UNIT		PAPER NUMBER		
1791				
MAIL DATE		DELIVERY MODE		
01/29/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/562,947

**Applicant(s)**

SUZUKI ET AL.

**Examiner**

Justin R. Fischer

**Art Unit**

1791

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/US)  
Paper No(s)/Mail Date 123005.080306
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 5, 6, and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda (JP 59-196338) and further in view of Imamura (US 3,913,652) and Scriver (US 4,192,366). Ueda teaches a tread composition comprising between 5 and 60 phr of natural rubber and/or polyisoprene having a cis 1,4 content greater than 90 percent (Abstract). Thus, Ueda positively suggests a composition containing both natural rubber and cis 1,4 polyisoprene, wherein the 1,4 content is at least 99 percent and the 3,4 content is not more than 0.5 percent (disclosure of Ueda fully encompasses claimed combination), it being noted that a cis 1,4 content of about 99 percent is consistent with typical or conventional tread compositions, as shown for example by Scriver (Column 2, Lines 20-25). Ueda, however, is completely silent with respect to the Mooney viscosity of the cis 1,4 polyisoprene. In any event, the claimed viscosity is consistent with the high cis 1,4 polyisoprenes used in the tire industry, as shown for example by Imamura (Column 2, Lines 22-25). Absent any conclusive showing of unexpected results, one of ordinary skill in the art at the time of the invention would have found it obvious to use a cis 1,4 polyisoprene having the claimed Mooney viscosity.

Regarding claims 2 and 3, Ueda broadly teaches the use of natural rubber and cis 1,4 polyisoprene at a total loading between 5 and 60 percent (based on 100 phr of total rubber components). Based on the general disclosure of Ueda, one of ordinary skill in the art at the time of the invention would have found it obvious to use more natural rubber, less natural rubber, or the same amount of natural rubber, as compared to the cis 1,4 polyisoprene content.

As to claims 5 and 6, the rubber composition of Ueda includes carbon black (e.g. HAF) at a loading of 50 phr (Table 2).

With respect to claim 9, the composition of Ueda is sulfur crosslinkable.

Regarding claims 10 and 11, the language "used for tread" and "used for a casing member" do not further define the makeup of the claimed rubber composition.

3. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda, Scriver, and Imamura as applied in claim 1 above and further in view of Inui (US 5,191,003). As noted above, the composition of Ueda includes HAF carbon black. While the reference is silent with respect to the nitrogen adsorption specific surface area, HAF carbon blacks are known to have a surface area greater than 70 m<sup>2</sup>/g, as shown for example by Inui (Column 4, Lines 13-25). Absent any conclusive showing of unexpected results, one of ordinary skill in the art at the time of the invention would have found it obvious to use a carbon black having the claimed surface area.
4. Claims 1-6 and 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Segatta (US 5,396,940) and further in view of Imamura and Scriver. Segatta is directed to a rubber composition comprising 5-95 phr of epoxidized natural rubber

(claimed natural rubber), 5-95 phr of cis 1,4 polyisoprene, and 5-85 phr of silica (Column 1, Lines 63+). In this instance, given the general disclosure of Segatta, one of ordinary skill in the art at the time of the invention would have found it obvious to use a combination of natural rubber and cis 1,4 polyisoprene.

While Segatta is silent with respect to the cis 1,4 content and associated Mooney viscosity, the claimed characteristics are consistent with the conventionally used polyisoprene rubbers in the tire industry, as shown for example by Imamura (Column 2, Lines 22-25) and Sriver (Column 2, Lines 20-25). Absent any conclusive showing of unexpected results, one of ordinary skill in the art at the time of the invention would have found it obvious to use the claimed cis 1,4 polyisoprene.

Regarding claims 2-4, the total content of natural rubber and cis 1,4 polyisoprene is 100 phr.

As to claims 5, 6, and 8, the composition of Segatta includes between 5 and 85 phr of silica having a surface area between 40 and 600 m<sup>2</sup>/gram. Absent any conclusive showing of unexpected results, one of ordinary skill in the art at the time of the invention would have found it obvious to select a surface area of at least 180 m<sup>2</sup>/gram.

With respect to claim 9, the composition of Segatta is sulfur crosslinkable (Abstract).

Regarding claims 10 and 11, the language "used for tread" and "used for a casing member" do not further define the makeup of the claimed rubber composition.

As to claim 12, the rubber composition of Segatta is used for the manufacture of tire treads and/or carcass plies (casing member).

***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Justin R. Fischer** whose telephone number is **(571) 272-1215**. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Justin Fischer  
/Justin R Fischer/  
Primary Examiner, Art Unit 1791  
January 23, 2009

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